

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 16 JAN 2006

PCT

PCT

Applicant's or agent's file reference 188-03	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/SE2004/001765	International filing date (day/month/year) 29-11-2004	Priority date (day/month/year) 09-12-2003
International Patent Classification (IPC) or national classification and IPC See Supplemental Box		
Applicant SCANIA CV AB (publ) et al		

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 4 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
 - ☒ (sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:
 - ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

- This report contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the report |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

Date of submission of the demand 01-07-2005	Date of completion of this report 02-01-2006
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. +46 8 667 72 88	Authorized officer Daniel Åberg / JA A Telephone No. +46 8 782 25 00

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SE2004/001765

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: **Cover sheet**

INTERNATIONAL PATENT CLASSIFICATION (IPC):

B62D 1/08 (2006.01)

B62D 1/04 (2006.01)

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SE2004/001765

Box No. I Basis of the report

1. With regard to the language, this report is based on:

- ☒ the international application in the language in which it was filed
☐ a translation of the international application into _____,
which is the language of a translation furnished for the purposes of:
☐ international search (Rules 12.3(a) and 23.1(b))
☐ publication of the international application (Rule 12.4(a))
☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

- ☐ the international application as originally filed/furnished
☒ the description:
pages 1 - 6 as originally filed/furnished
pages* _____ received by this Authority on _____
pages* _____ received by this Authority on _____
☒ the claims:
pages _____ as originally filed/furnished
pages* _____ as amended (together with any statement) under Article 19
pages* 7, 8 received by this Authority on 23-12-2005
pages* _____ received by this Authority on _____
☒ the drawings:
pages 1 as originally filed/furnished
pages* _____ received by this Authority on _____
pages* _____ received by this Authority on _____
☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
☐ the claims, Nos. _____
☐ the drawings, sheets/figs _____
☐ the sequence listing (*specify*): _____
☐ any table(s) related to the sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
☐ the claims, Nos. _____
☐ the drawings, sheets/figs _____
☐ the sequence listing (*specify*): _____
☐ any table(s) related to the sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SE2004/001765

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-5</u>	YES
	Claims		NO
Inventive step (IS)	Claims	<u>1-5</u>	YES
	Claims		NO
Industrial applicability (IA)	Claims	<u>1-5</u>	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Documents cited in the International Search Report:

D1: JP 6329025 A
D2: JP 5131933 A
D3: US 5090731 A
D4: US 5002306 A
D5: US 4638131 A

The cited documents represent the general state of the art.
The invention defined in claims 1-5 is not disclosed by any of these documents.

The cited prior art does not give any indication that would lead a person skilled in the art to the claimed vehicle steering wheel. Therefore, the claimed invention is not obvious to a person skilled in the art.

Accordingly, the invention defined in claims 1-5 is novel and is considered to involve an inventive step. The invention is industrially applicable.

CLAIMS

1. A vehicle steering wheel (1) comprising a rim (2), a signal cap (3) and two upper and two lower spokes (4, 5) extending between the rim (2) and the signal cap (3), the upper spokes (4) extending along the horizontal symmetry axis (H-H) of the steering wheel (1) towards its centre, **characterized in** that the two lower spokes (5) are graspable, that the lower spokes (5) extend from positions around the rim (2) so that points P_1, P_2 that are in line with the upper edge of the respective lower spokes (5) on the outer surface of the rim are located between 30° and 60° below the horizontal symmetry axis (H-H) on either side of the vertical symmetry axis (V-V) of the steering wheel (1), and that the upper edge of the lower spokes (5), which is in line with the respective points P_1, P_2 form an angle (β) of between 62° and 82° with the vertical symmetry axis (V-V) of the steering wheel (1) and in that a multifunctional switch module (6) with thumb-operated control buttons (7) for remote actuation of specific vehicle functions is located symmetrically between the two lower spokes (5) beneath the signal cap (3), wherein the driver can operate the module while grasping the lower spokes.
2. The steering wheel according to claim 1, **characterized in** that the two points P_1, P_2 are situated 40° below the horizontal symmetry axis (H-H) on either side of the vertical symmetry axis (V-V) of the steering wheel (1).
3. The steering wheel according to claim 1 or 2, **characterized in** that the angle (β) from the vertical symmetry axis (V-V) of the steering wheel to the respective points P_1, P_2 are between 67° and 77° .
4. The steering wheel according to claim 3, **characterized in** that the angle (β) is 72° .

23-12-2005

5. The steering wheel according to any of claims 1 - 4, **characterized in** that the lower spokes (5) are separated from the upper spokes (4) by spaces (8) for receiving a driver's elbows.